

## Thumb Screws for the Light Emitting Diode Weather Identifier (LEDWI) Calibration Tube

## GENERAL

The LEDWI calibration tube is used to shield the transmitter and receiver lenses from any stray radiation during the sensor's calibration procedure. The adjustable outer tube sections slide into the center section forming the tube that extends between the transmitter and receiver heads.

When the two adjustable sections are inserted into the center section, the tubes do not fit tightly. During calibration, wind and light vibrations have caused the calibration tube to collapse and fall. This procedure will install thumb screws ensuring that the calibration tube remains rigid and sturdy during the calibration.

## TOOLS: (Obtain tools locally)

Drill, Motor - 1

13/64" drill bit - 1

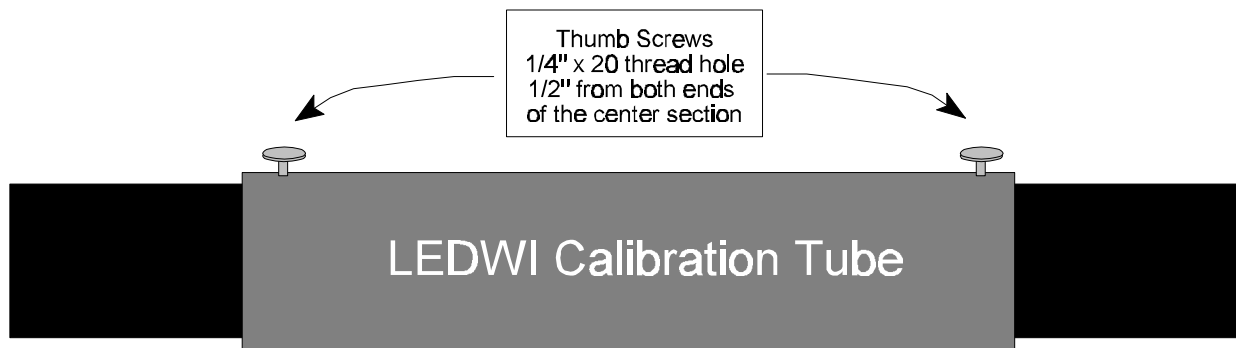
1/4" x 20 thread tap drill - 1

## PARTS: (Obtain parts locally)

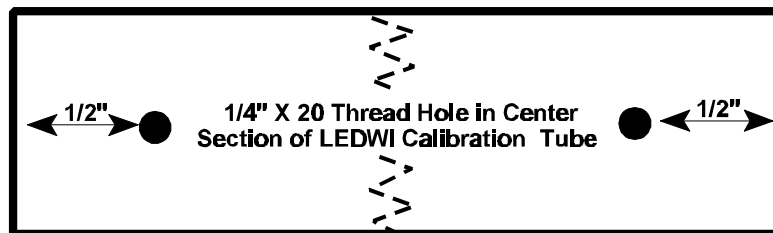
Thumb Screws ((1/4" x 20 thread) x 1" in length) - 2

## PROCEDURE

1. Remove the large center tube from the LEDWI calibration kit.
2. Secure the tube (via a vice or some other means) in preparation of drilling.
3. Drill a 13/64" hole, one-half inch from either end of the tube. Reference figures 1 and 2.
4. On the other end of the tube, directly across from the first drilled hole, drill the second hole one-half inch from the edge of the tube. Reference figures 1 and 2.
5. Using the 1/4" x 20 thread tap drill, proceed to tap the two drilled holes.
6. After tapping, clean the holes thoroughly from any loose shavings.
7. Insert thumb screws.



**Figure 1 Modified LEDWI Calibration Tube with Thumb Screws**



**Figure 2 Positioning of the Thumb Screw Holes in the Center Calibration Tube Section (Not to Scale)**

REPORTING  
None

EFFECT ON OTHER INSTRUCTIONS  
None

REPORT MAINTENANCE ACTION  
None

***Original Signed***

John McNulty  
Chief, Engineering Division

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